

**INTERFERENCE CANCELLATION OF A NARROW BAND INTERFERER
IN A WIDE BAND COMMUNICATION DEVICE**

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ABSTRACT OF THE DISCLOSURE

Interference cancellation/suppression by a wide band radio (100) includes the

10 steps of searching for all narrow band interferer signals such as Bluetooth signals (502).
Communicating with the detected Bluetooth piconets (504). Estimating when the
Bluetooth signals will occur (506) using the information received during step (504) . And
using a suppression technique in association with the estimations as to when/where the
interfering signals will occur in order to counter the interfering signal(s). In an alternate

15 embodiment, both the narrow band (304) and wide band (302) signals are stored (306).
Then the one or more narrow band Bluetooth signal(s) (304) and decoded (308) and
subtracted (308) from the wide band packet prior to it being decoded (312).

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